

## FORM 5-1

Practitioner's Docket No. MC1-8346

PATENT

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JUN 15 2007

In re application of: Andrew Mark Shaw

Serial No.: 10/593,219                          Group No.: n/a  
 Filed: 15 September 2006                          Examiner: n/a  
 For: Cavity Ring-Down Sensing Apparatus and Method

Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

COMPLETION OF FILING REQUIREMENTS  
 - NONPROVISIONAL APPLICATION

(check and complete this item, if applicable)

This replies to the Notice to File Missing Parts of Application (PTO-1533) mailed May 16, 2007.

NOTE: If these papers are filed before the office letter issues, adequate identification of the original papers should be made, e.g., in addition to the name of the inventor and title of invention, the filing date based on the "Express Mail" procedure, the serial number from the return post card or the attorney's docket number added.

A copy of the Notice to File Missing Parts of Application-Filing Date Granted (Form PTO-1533) is enclosed.

NOTE: The PTO requires that a copy of Form PTO-1533 be returned with the response to the notice to file missing parts to the application.

## CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

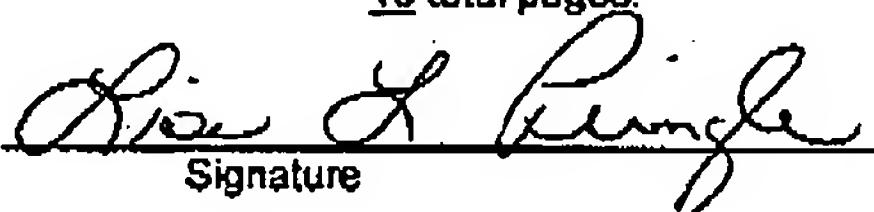
## MAILING

## FACSIMILE

deposited with the United States Postal Services with sufficient postage as first class mail, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

transmitted by facsimile to the Patent and Trademark Office @ (571)273-8300.  
13 total pages.

Date:

15 June 2007
  
 Signature

Lisa L. Pringle

(type or print name of person certifying)

(Completion of Filing Requirements - Nonprovisional Application [5-1] - page 1 of 6)

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**DECLARATION OR OATH**

JUN 15 2007

II.  No declaration or oath was filed. Enclosed is the original declaration or oath for this application.

**NOTE:** If the correct inventor or inventors are not named on filing a nonprovisional application under § 1.53(b) without an executed oath or declaration under § 1.63, the later submission of an executed oath or declaration under § 1.63 during the pendency of the application will act to correct the earlier identification of Inventorship. 37 CFR § 1.48(f)(1).

**OR**

The declaration or oath that was filed was determined to be defective. A new original oath or declaration is attached.

**NOTE:** For surcharge fee for filing declaration after filing date complete item VI(3) below.

**NOTE:** Acceptable minimums in the declaration for identification of the specification to which it applies are the name of the inventor and (1) serial number (2) attorney docket number which was on the application as filed and the filing date (3) title of the invention and filing date (4) title of invention and reference to a specification which is attached to the declaration at the time of execution and filed with the declaration or (5) title of invention and a statement by a registered attorney that the application filed in the PTO is the application which the inventor executed by signing the declaration. If identification (4) is used it must be accompanied by a statement that the "attached" specification is a copy of the specification and any amendments thereto which were filed in the PTO to obtain the filing date; such a statement must be a verified statement if made by a person not registered to practice before the PTO. Notice of September 12, 1983 (1035 O.G. 3).

**NOTE:** Another minimum found acceptable in the declaration is the filing date (i.e., date of express mail) and the express mail number, useful where the serial number is not yet known. But note the practice where the express mail deposit is Saturday, Sunday or holiday within the District of Columbia. 37 CFR 1.10(c).

(complete (c) or (d), if applicable)

Attached is a

(c)  Statement by a registered attorney that the application filed in the PTO is the application that the inventor executed by signing the declaration.

(d)  Statement that the "attached" specification is a copy of the specification and any amendments thereto that were filed in the PTO to obtain the filing date.

**AMENDMENT CANCELING CLAIMS**

III.  Cancel claims \_\_\_\_\_ inclusive.

**TRANSMITTAL OF ENGLISH TRANSLATION  
OF NON-ENGLISH LANGUAGE PAPERS**

IV.  Submitted herewith is an English translation of the non-English language application papers as originally filed. Also submitted herewith is a statement by the translator of the accuracy of the translation. It is requested that this translation be used as the copy for examination purposes in the PTO.

**NOTE:** For fee processing a non-English application, complete item VI(5) below.

**NOTE:** A non-English oath or declaration in the form provided by the PTO need not be translated. 37 CFR 1.69(b).

(Completion of Filing Requirements - Nonprovisional Application [5-1] - page 2 of 6)

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**SMALL ENTITY STATUS**

**JUN 15 2007**

V.  A statement that this filing is by a small entity  
*(check and complete applicable items)*

is attached.

A separate refund request accompanies this paper.

was filed on 15 September 2006 (original).

**COMPLETION FEES**

VI.

**WARNING:** Failure to submit the surcharge fees where required will cause the application to become abandoned. 37 CFR 1.53.

**NOTE:**

For effect on fees of failure to establish status, or change status, as a small entity, see 37 CFR 1.28(a).

1. Filing Fee

original patent application  
(37 CFR 1.16(a)(2) - \$790.00; Small entity - \$395.00) \$ \_\_\_\_\_

design application  
(37 CFR 1.16(b)(2) - \$350.00; small entity - \$175.00) \$ \_\_\_\_\_

2. Fees for claims

each independent claim in excess of 3  
(37 CFR 1.16(h) - \$200.00; small entity - \$100.00) \$ \_\_\_\_\_

each claim in excess of 20  
(37 CFR 1.16(i) - \$50.00; small entity - \$25.00) \$ \_\_\_\_\_

multiple dependent claim(s)  
(37 CFR 1.16(j) - \$360.00; small entity - \$180.00) \$ \_\_\_\_\_

3. Surcharge fees

late payment of filing fee

*and/or*

late filing of original declaration or oath  
(37 CFR 1.16(f) - \$130.00; small entity - \$65.00); \$ 65.00

**NOTE:** Even when a facsimile declaration or oath signed by the inventor(s) was part of the originally filed papers, the surcharge fee is required.

**NOTE:** If both the filing fee and declaration or oath were missing from the original papers, only one surcharge fee for both need be paid. 37 CFR 1.16(e).

**(Completion of Filing Requirements - Nonprovisional Application [5-1] - page 3 of 6)**

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4.  Petition and fee for filing by other than all the inventors or a person not the inventor  
(37 CFR 1.17(h) - \$130.00) \$\_\_\_\_\_

5.  Fee for processing an application filed with a specification in a non-English language  
(37 CFR 1.17(i) - \$130.00) \$\_\_\_\_\_

6.  Fee for processing and retention of application  
(37 CFR 1.21(l) and 1.53(d) - \$130.00) \$\_\_\_\_\_

7.  Assignment (see "ASSIGNMENT COVER SHEET") \$40.00

**NOTE:** 37 CFR 1.21(l) establishes a fee for processing and retaining any application which is abandoned for failing to complete the application pursuant to 37 CFR 1.53(l) and this, as well as, the changes to 37 CFR 1.53 and 1.78 indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee or the processing and retention fee of § 1.21(l) within 1 year of notification under § 1.53(l) must be paid.

Total completion fees \$105.00**EXTENSION OF TIME****VII.**

(complete (a) or (b), as applicable)

The proceedings herein are for a patent application, and the provisions of 37 CFR 1.136(a) apply.

(a)  Applicant petitions for an extension of time, the fees for which are set out in 37 CFR 1.17(a)(1)-(5), for the total number of months checked below:

Extension (months)	Fee for other than <u>small entity</u>	Fee for <u>small entity</u>
<input type="checkbox"/> one month	\$ 120.00	\$ 60.00
<input type="checkbox"/> two months	\$ 450.00	\$225.00
<input type="checkbox"/> three months	\$1,020.00	\$510.00
<input type="checkbox"/> four months	\$1,590.00	\$795.00
<input type="checkbox"/> five months	\$2,160.00	\$1,080.00

Fee \$\_\_\_\_\_

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

An extension for \_\_\_\_\_ month(s) has already been secured, and the fee paid therefor of \$\_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$\_\_\_\_\_

or

(b)  Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

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**TOTAL FEE DUE**

VIII.

The total fee due is

Completion fee(s) \$105.00

Extension fee (if any) \$\_\_\_\_\_

**PAYMENT OF FEES**

IX.

Charge Credit Card in the amount of \$105.00. Enclosed is Form PTO-2038.  
 Charge Account No. \_\_\_\_\_ in the amount of \$\_\_\_\_\_  
A duplicate of this request is attached.

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 CFR 1.22(b).

Please charge Account No. \_\_\_\_\_ for any fees that may be due by this paper.

**AUTHORIZATION TO CHARGE ADDITIONAL FEES**

X.

**WARNING:** accurately count claims, especially multiple dependant claims, to avoid unexpected high charges if extra claims are authorized.

NOTE:

"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 CFR § 1.26(a).

The Commissioner is hereby authorized to charge the following additional fees that may be required by this paper and during the pendency of this application to Account No. 20-0090.

37 CFR 1.16(a), (f) or (g) (filing fees)  
 37 CFR 1.16(b), (c) and (d) (presentation of extra claims)

NOTE:

Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)  
 37 CFR §§ 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))  
 37 CFR 1.17 (application processing fees)

NOTE:

"A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 CFR § 1.136(a)(3).

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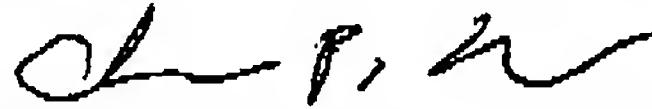
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37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR 1.311(b)).

**NOTE:** *When an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR 1.311(b).*

**NOTE:** *37 CFR 1.28(b) requires "Notification of any change in loss of entitlement to small entity status must be filed in the application...prior to paying, or at the time of paying...issue fee..." From the wording of 37 CFR 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.*



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**SIGNATURE OF PRACTITIONER**

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**REG. NO. 43,660**

**Christopher P. Harris**  
(type or print name of practitioner)

**TEL. No.: (216)621-2234**

**Tarolli, Sundheim, Covell & Tummino LLP**  
1300 East Ninth Street  
Suite 1700  
Cleveland, OH 44114

**Customer No.: 26294**

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**(Completion of Filing Requirements - Nonprovisional Application [5-1] - page 6 of 6)**

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UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

JUN 15 2007

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/593,219	Andrew Mark Shaw	MC1-8346

26294  
 TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.  
 1300 EAST NINTH STREET, SUITE 1700  
 CLEVELAND, OH 44114



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MAY 18 2007

TAROLLI, SUNDHEIM,  
COVELL & TUMMINO L.L.P.

INTERNATIONAL APPLICATION NO.

PCT/GB05/50036

I.A. FILING DATE	PRIORITY DATE
03/15/2005	03/15/2004

CONFIRMATION NO. 7038

371 FORMALITIES LETTER



OC000000023878428\*

Date Mailed: 05/16/2007

MCL-734  
CPH

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 09/15/2006
- Copy of the International Search Report filed on 09/15/2006
- Preliminary Amendments filed on 09/15/2006
- Information Disclosure Statements filed on 09/15/2006
- U.S. Basic National Fees filed on 09/15/2006
- Specification filed on 09/15/2006
- Claims filed on 09/15/2006
- Abstracts filed on 09/15/2006
- Drawings filed on 09/15/2006

FILE NO:MC1-8346 ATTY:CPH  
 DUE DATE:07-16-2007 ( 20070716 )  
 MARKS & CLERK /INIT:( 20070516 )  
 ACTION:10 RES PER:2 M DK1  
 MISSING REQUIREMENTS DUE / 1127

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5).

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<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

DARRELL C COTTMAN

Telephone: (703) 308-9140 EXT 203

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/593,219	PCT/GB05/50036	MC1-8346

FORM PCT/DO/EO/905 (371 Formalities Notice)